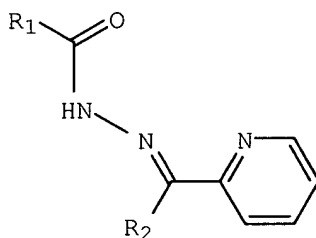


Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) analogue suitable for use as an *in vivo* iron chelator, the PCIH analogue having Formula 1:



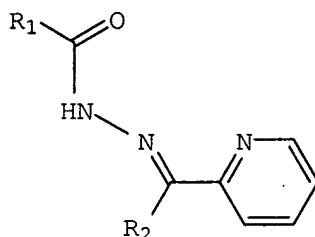
Formula 1

wherein R2 is either OH or H such that when R2 is OH R1 is a phenyl, pyridine, furan or thiophene ring optionally with alkyl, halo, nitro, amine, or hydroxyl attached to any of the vacant positions on the ring; isomers thereof; or salts thereof; or when R2 is H, R1 is ~~thiophene~~, 2-, 3- or 4-bromophenyl optionally substituted with alkyl, halo, nitro, or amine ~~or hydroxyl~~ attached to any of the vacant positions on the ring; ~~phenol or aniline~~, or isomers or salts thereof.

2-3. (Canceled)

4. (Currently Amended) The PCIH analogue according to claim 1 selected from the group consisting of 2-pyridylcarboxaldehyde m-bromobenzoyl hydrazone (PCBBH), ~~2-pyridylcarboxaldehyde p-aminobenzoyl hydrazone (PCAH), 2-pyridylcarboxaldehyde p-hydroxybenzoyl hydrazone (PCHH), 2-pyridylcarboxaldehyde 2-thiophenecarboxyl hydrazone (PCTH)~~, salts thereof, and isomers thereof.

5. (Currently amended) A pharmaceutical composition suitable for use as an iron chelator comprising a therapeutically effective amount of at least one 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) analogue having Formula 1:



Formula 1

wherein R₂ is either H or OH such that when R₂ is OH R₁ is a phenyl, pyridine, furan or thiophene ring optionally with alkyl, halo, nitro, amine, or hydroxyl attached to any of the vacant positions on the ring; isomers thereof or salts thereof; or when R₂ is H, R₁ is thiophene, 2-, 3- or 4-bromophenyl optionally

substituted with alkyl, halo, nitro, or amine ~~or hydroxyl~~
attached to any vacant positions on the ring, phenol or aniline;
or isomers or salts thereof; together with a pharmaceutically
suitable carrier or diluent.

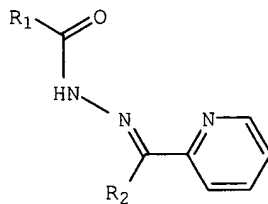
6-7. (Canceled)

8. (Currently amended) The pharmaceutical composition
according to claim 5 wherein the 2-pyridylcarboxaldehyde
isonicotinoyl hydrazone (PCIH) analogue is selected from the
group consisting of ~~2-pyridylcarboxaldehyde isonicotinoyl~~
~~hydrazone (PCIH)~~, 2-pyridylcarboxaldehyde 2-thiophenecarboxyl
hydrazone (PCTH), ~~2-pyridylcarboxaldehyde benzoyl hydrazone~~
~~(PCBH)~~, 2-pyridylcarboxaldehyde m-bromobenzoyl hydrazone (PCBBH),
2-pyridylcarboxaldehyde p-aminobenzoyl hydrazone (PCAH), 2-
pyridylcarboxaldehyde p-hydroxy benzoyl hydrazone (PCHH), salts
thereof, and isomers thereof.

9. (Previously presented) The pharmaceutical composition
according to claim 5 formulated for subcutaneous or intravenous
injection, oral administration, inhalation, transdermal
application, or rectal administration.

10. (Previously presented) A method of iron chelation
therapy comprising administering to a patient a pharmaceutical
composition comprising a therapeutically effective amount of at

least one 2-pyridylcarboxaldehyde isonicotinoyl hydrazone (PCIH) analogue having Formula 1:



Formula 1

wherein R₁ is a phenyl, pyridine, furan or thiophene ring optionally with alkyl, halo, nitro, amine or hydroxyl attached to any of the vacant positions on the ring, and R₂ is either H or OH, isomers thereof or salts thereof, together with a pharmaceutically suitable carrier or diluent.

11. (Canceled)

12. (Currently amended) The method according to claim 10 wherein the pharmaceutical composition is administered in a dosage regimen of 30 - 500 mg per kg of body weight of the patient.

13. (Original) The method according to claim 12 wherein the dosage regimen is 50 - 100 mg per kg of body weight.

14. (Previously presented) The method according to claim 16 wherein the patient suffers from β -thalassemia or Friedreich's ataxia.

15. (Canceled)

16. (Previously presented) The method according to claim 10 wherein the patient suffers from iron-overload.